

**PROJECT ON PROMOTING PRODUCTION AND TRADING OPPORTUNITIES FOR
ORGANIC AGRICULTURE IN EAST AFRICA**

The Status of Organic Agriculture Production and Trading Opportunities in Tanzania.

Final Report

February, 2006

SPONSORED BY



UNEP



UNCTAD

NATIONAL IMPLEMENTATION TEAM

CBTF
Capacity Building
Task Force
on Trade, Environment and
Development



Ministry of
Agriculture and
Food Security



Table of contents

Acronyms and Abbreviations	iii
1.0 Introduction	1
1.1 Background Information	1
1.2 Problem Statement.....	2
1.3 Objectives	3
1.3.1 Specific objectives.....	3
1.4 Methodology.....	3
2.0 Review of Past Studies and Assessments on OA and Methodologies Used.....	3
2.1 Studies and Methodologies used.....	4
2.2 International Initiatives.....	5
2.3 National Policies.....	6
2.4.1 Gender	8
2.4.2 Environment	8
2.4.3 High Morbidity and Mortality rates due to HIV/AIDS, Malaria and Waterborne Diseases.....	8
2.4.4 Land Tenure.....	8
2.4.5 Water, Forestry and Wildlife.....	8
2.4.6 Energy.....	8
2.4.7 Communications.....	9
2.5 Institutions/organisations Supporting OA	9
2.5.1 Involvement of institutions in promoting OA	9
2.5.2 Export Promotion of Organic Products from Africa (EPOPA).....	10
2.5.3 Tanzania OA Movement (TOAM).....	10
3.0 Status of the Organic Sector in Tanzania	10
3.1 Crop production.....	10
3.2 Livestock Development.....	12
3.3 Marketing of Organic Products	12
3.4 The Local Market for Organic Products.....	13
3.5 Export strategy and Market Penetration	13
3.6 Indigenous Knowledge.....	14
3.7 Certification of OA products.....	14
3.8 Organic Agricultural Standards.....	15
3.8 Organic Agricultural Standards.....	16
3.8.1 Official National Standards Body for Tanzania	16
3.8.2 Private OA Certification Bodies.....	17
4.0 OA Stakeholders Analysis.....	17
4.1 Participatory Process for IA in OA in Tanzania.....	17
5.0 High Potential Crops for the IA Study.....	19
6.0 Constraints to Organic Agricultural Production and Trade.....	19
7.0 Summary.....	21
8.0 General Recommendations.....	21
9.0 References	23
Annexes	25
Tables.....	38

Acronyms and Abbreviations

A-AARNET	ASARECA Animal Agriculture Research Network
ADP-Mbozi	Agriculture Development Programme
ADRI	Animal Diseases Research Institute
ASARECA	Association for Strengthening Agricultural Research in Eastern and Central Africa
ASDP	Agricultural Sector Development Program
BET	Board of External Trade
CAC	Codes Alimentarius Commission
CBI	Centre for the Promotion of Imports from Developing Countries
CBOs	Community Based Organizations
CBTF	Capacity Building Task Force
COMESA	Common Market for Eastern and Southern Africa
CRSP	Collaborative Research Support Program
EAC	East African Community
ECOL	A Company producing organic cotton
EGAJ	Promotion of Sustainable Agriculture
Envirocare	Environmental, Human Rights Care and Gender Organisation
EPOPA	Export Promotion for Organic Products from Africa
EU	European Union
EUREP GAP	Code of practice (Good Agricultural Practice and Certification Procedures)
FAO	Food and Agriculture Organization
GTZ	German Technical Co-operation Agency
GL-CRSP	Global Livestock Collaborative Research Support Program
HACCP	Hazard Analysis Critical Control Points system
HIMA	Hifadhi Mazingira
IA	Integrated Assessment
IFOAM	International Federation for OA Movement
ISO	International Organisation of Standards
ITC	International Trade Centre
KATC	Kilimanjaro Agricultural Training Centre
KCU	Kagera Cooperatives Union
KIHATA	Kilimo Hai Tanzania

KNCU	Kilimanjaro Native Cooperative Union
KNFS	Kilimanjaro Natural Food Cooperative Society
LAMP	Land Management Programme
MAFS	Ministry of Agriculture and Food Security
MATI	Ministry of Agriculture Training Institute
MAYAWA	Maendeleo Ya Wakulima
MEA	Millennium Ecosystem Assessment
MRLs	Minimum Residue Levels
NGOs	Non Governmental Organizations
OA	Organic Agriculture
PCI	Premier Cashew Industry Limited
PELUM	Participatory Ecological Land Use Management
SADC	Southern Africa Development Community
SEA	Strategic Environmental Assessment
SECAP-GTZ	Soil Erosion Control and Agroforestry Programme
SFI	Soil Fertility Initiative
Sida	Swedish International Development Agency
SUA	Sokoine University of Agriculture
TanCert	Tanzania Organic Certification Association
TAWLAE	Tanzania Association for Women Leaders in Agriculture and Environment
TBS	Tanzania Bureau of Standards
TCCIA	Tanzania Chamber of Commerce, Agriculture and Industry
TOAM	Tanzania OA Movement
TOFO	Tanzania Organic Foundation
TPRI	Tropical Pesticides Research Institute
UDSM	University of Dar Es Salaam
UK	United Kingdom
UNCTAD	United Nations Conference on Trade and Development
UNEP	United Nations Environment Program
USA	United States of America
WB	World Bank
WTO	World Trade Organization
ZANOP	Zanzibar Organic Products

1.0 Introduction

1.1 Background Information

The first garden on organic agriculture (OA) in Tanzania was established in September 1898 at Peramiho Mission in Ruvuma region under Bro. Thomas Morus Bertram OSB. The garden was initially fertilized by compost wood, stable manure, ash and later on green manure became an important material for soil fertility improvement. Following this initiative some organisations came up with various projects addressing organic principles in the form of sustainable agriculture and ecological farming. In 1990s the idea by these organisations, to make a move to collaborate in the development of OA in the country started. The organizations that took the initiative included Participatory Ecological Land Use Management-Tanzania (Pelum-Tz), Sunnhemp Seed bank, Kilimo Hai Tanzania (KIHATA), Promotion of Sustainable Agriculture (EGAJ), Inades Tanzania, and Agriculture Development Programme (ADP-Mbozi). The projects involved in the initiative were Soil Erosion Control and Agroforestry Programme (SECAP) that was supported with Germany Technical Cooperative Agency (GTZ), Meatu Cotton Project, Hifadhi Mazingira Project (HIMA) and Land Management Programme (LAMP). The efforts of these stakeholders led to the formation of a local certification body (TanCert) and an organization representing the movement, the Tanzania Organic Agricultural Movement (TOAM), in the years 2004 and 2005 respectively.

Crops under organic farming include cotton, coffee, black tea, cocoa, ginger and spices, essential oils (lemon grass), honey, and cashew nuts. Other crops include fresh fruits (citrus, papaya, guava, mango); dried fruits (banana, pineapple, mango, papaya); herbs and spices (cinnamon, ginger, vanilla, chilli, pepper, nutmeg, cardamom, clove, curry, lemon grass). There is also oil seeds (sunflower) and oils (palm oil, sunflower oil), tea (hibiscus tea), vegetables (fresh mostly peas), processed vegetables e.g. garlic and onion powder. A number of these crops have continued to be grown organically by 'default'. These crops were chosen for production and trade, based on the availability of both local and export markets. Potential areas for organic production and trade include Muheza, Handeni and Kilindi (Tanga region), Meatu (Shinyanga), Kasulu (Kigoma), Iringa, Mbeya, Morogoro, Rukwa, Arusha, Zanzibar, Kilimanjaro, Kagera and the Coast Region.

Assessment of the global market for organic products indicates that OA has a share worth 25 billion US Dollars, and that the largest markets are in the United States of America (USA), Japan, and Europe. Other markets coming up include Brazil and South East Asia.

It is estimated that in Tanzania farms altogether covering more than 14,500 ha of land are certified, the total number of certified farmers exceeding 30,000. Production of commercial organic products in the country is a result of the influence of the external markets, where the buyers arrange for the certification.

This background paper forms a basis for the implementation of the programme on Promoting Production and Training Opportunities for OA in East Africa under UNEP-UNCTAD Capacity Building Taskforce on Trade Environment and Development (CBTF). This initiative on Integrated Assessment (IA) of organic agricultural production and trade aims to enhance the capacities of Government Ministries and national institutions in participating countries to apply integrated methodologies to maximize the potential benefits from production and trade in organic agricultural products.

The information in this background paper comprises of a review of past studies and assessments on OA undertaken in the country, national institutions, international organizations and the donors involved. The paper also describes the current state of the national organic sector, including production, exports, prices, certification, domestic markets, standards, yields/productivity and identification of the main actors/stakeholders involved. Finally, constraints that affect production, marketing and institutional constraints to OA production and trade are highlighted, summary is provided and few recommendations are made.

1.2 Problem Statement

There are inadequate capacities to carry out OA initiatives, such as IA, research, training and extension services. This is mainly attributed to the lack of policy and regulations on OA. In addition, lack of coordination in the OA industry has affected availability of information; this is a limiting factor that has also hindered proper addressing of constraints affecting production, marketing and institutional support.

1.3 Objectives

The overall objective is to generate baseline information and data on the state of OA and assessing policies that influence its production and trading opportunities in Tanzania.

1.3.1 Specific objectives.

The specific objectives are: -

1. To review past studies and assessments on OA undertaken in the country, including an analysis of the methodologies used and what national institutions, international organisations and donors have been involved; and
2. To describe the current state of the national organic sector, including on production, exports, prices, certification, domestic market, standards, yields/productivity; identification of the main actors/stakeholders involved; and identification of existing production, marketing and institutional constraints to OA production and trade.

1.4 Methodology

The information was collected through direct interviews with selected individuals involved in organic activities and through two types of questionnaires which were prepared and e-mailed to two targeted groups: (a) farmers, processors and exporters; (b) promoters and supporters of OA [(Refer to Annexes I & II)]. Secondary data was collected from relevant sources including international organizations, NGOs, CBOs and government institutions; various websites were visited. Information was basically collected based on the provided Terms of Reference.

2.0 Review of Past Studies and Assessments on OA and Methodologies Used.

There are scanty literature on studies and assessments conducted in the country indicating status of OA and various technologies and skills used. Most of the assessment studies that have been conducted are not directly linked to OA, instead they analyze various environmental situations related to environmental degradation. Some of the studies are: -

- Capacity building for IA and planning for sustainable development
- IA of Pastoral Wildlife Interactions in East Africa

2.1 Studies and Methodologies used.

▪ Capacity building for IA and planning for sustainable development

In November 2003, the UNEP-Economics and Trade Branch, and the United Republic of Tanzania, implemented this initiative which aimed at enhancing capacities, particularly in developing countries by undertaking IA and planning for sustainable development, with particular focus on agriculture, poverty alleviation, environment management and sustainable trade promotion.

The study methodologies used were the Strategic Environmental Assessment (SEA) and the Millennium Ecosystem Assessment (**MEA**). SEA involves reviewing policy, plan and program proposals to incorporate environmental considerations into the development of public policies. MEA is a ‘multi-scale’ assessment, meaning that it involves components (‘sub-global assessments’) at every geographic scale from local communities, to river basins, to regions, to the globe, and it emphasizes the interactions across scales. The primary goals of the MEA sub-global assessments are to meet the needs of decision-makers at the scale at which the assessments are conducted, and to build capacity to undertake IAs.

The initiative which builds on and is undertaken in association with the UNEP/Norway Poverty – Environment partnership Programme, will develop and test a robust approach of IA and Planning (IAP) for sustainable development through pilot studies conducted in eight (8) developing and transitional countries.

▪ IA of Pastoral Wildlife Interactions in East Africa

Other integrated studies include IA of Pastoral Wildlife Interactions in East Africa (GL-CRSP Project) Annual Report 2003 A-AARNET ASARECA Animal Agriculture Research and Knowledge of the land: Land Resources Information and its use in Rural Development by; Barrland Dalal-Clayton, David Dent, DB Dala Clayton.

The work was done in three developing countries on two continents. The process, a comprehensive planning and assessment procedure, was initiated with priority-setting workshops in the three regions. As forums for client input, the workshops were intended to maximize the opportunity of regional professionals to present their views on the development issues confronting them. The problem models they developed established the scope for

activities within the region. Assessment teams, selected in an initial competition, developed projects that addressed the top priorities within the regions.

The problem model was the central component of the assessment process. Each team was charged with refining its problem model through in-field explorations. To ensure grassroots input, over 20 regional workshops involving 35 countries were conducted during the assessment period. The teams submitted final proposals, competing to be in GL-CRSP's current proposal, and winners were selected. The process was designed to be problem-driven and has produced results-oriented projects. In the East Africa Region, 13 institutions from Tanzania participated.

Note: Annex III indicates some of the publications on OA studies carried out by various institutions and individuals.

2.2 International Initiatives

Most international organisations focus mainly on the trade opportunities for other products than OA products from developing countries,. Examples of these organisations are FAO, Codex Alimentarius Commission (CAC), ITC, Sida, UNEP, WB and UNCTAD. This can be reflected by various activities carried out which in turn have created awareness on OA to many countries. For example: -

- In 1999 FAO, tabled the issue of OA for the first time and discussed OA as one of the approaches for sustainable agriculture. FAO explains further that properly managed, organic farming reduces or eliminates water pollution and helps conserve water and soil on the farm.
- In the next three years, the FAO's OA Programme will focus on information systems and networking arrangements for production, processing, conservation, labeling and marketing of organic produce. Other aspects will include policy and technical decision-support tools for productive and efficient organic farming systems, and studies, technical assistance and policy advice on production, certification and trade of certified OA agriculture products.
- In the year 2002 Sida conducted a study to assess the possibility for establishment of the regional standards for East African countries.
- Other organisations like ITC conducted a survey on the global organic market while UNCTAD made studies on organic crops, one of them being cotton.

- FAO, IFOAM and UNCTAD launched the International Task Force (ITF) on Harmonization and Equivalence in OA in October 2003. The team involves private and public institutions responsible in trade and regulatory activities in the OA sector.
- IFOAM activities are focused on OA development; IFOAM supports development of OA in developing countries through its program - IFOAM Growing Organic (I-GO).
- UNEP and UNCTAD are currently supporting the project on Promoting Production and trading Opportunities for OA in East Africa and the respective countries have started conducting the IA programme.

Further, benefits are realised as a result of bilateral, multilateral and regional co-operations such as SADC, EAC and COMESA. The donor community is currently aiding development projects in the country. Donors are keen to support the promotion of organic farming for the European market. The support offered includes technical training to local agricultural experts in adopting organic farming principles and opening up market opportunities of organic products through organizations like, the Export Promotion of Organic Products from Africa (EPOPA) under Sida.

Furthermore, countries like the Netherlands have initiated some studies on organic farming at micro level farmers, while other donor organisation such as GTZ, ITC and CBI have also carried out several feasibility studies on OA. The feasibility reports indicate availability of market opportunities in the EU for certified organic products from developing countries.

2.3 National Policies

Currently only the National Agricultural and Livestock Policy of 1997 contains a policy statement, found under **clause 5 d, on Environmental issues (v)**. It states that **“the ministry will promote agro-forestry and organic farming”**. But the same policy has some statements in other clauses that address principles of OA these include: -

- The government intends to promote intensification and diversification of agriculture production.
- Improve crop husbandry through soil erosion control and soil fertility improvement,
- Implement measures that will minimize encroachment in public lands including forests; woodlands, wetlands and pasture.
- Encourage control of agricultural run-offs of agrochemicals to minimize pollution of both surface and ground water.

- Introduce mechanisms to improve water use efficiency in irrigation including control of water logging and sanitation.
- Intensify plant genetic conservation programmes.
- Furthermore, the government will promote application of environmentally friendly tsetse fly eradication methods and it will carry out rationalization on grazing systems to mitigate overgrazing.

Currently the Ministry of Agriculture and Food Security (MAFS) is reviewing the agricultural policy of 1997. The stakeholders have contributed for an OA component, and the suggestions were submitted to the review team for inclusion in the new agricultural policy.

In addition there are Ministries whose policy development and policy monitoring mandate relate to development and functioning of OA industry. These include: Department of Environment in the Presidents Office, Ministry of Water and Livestock Development, Ministry of Natural Resources and Tourism, and Ministry of Land and Habitat. The government has realized the importance of OA although it is not well spelled out in its budget and various undertakings.

There are quite a number of OA related activities which the government has implemented. These include a seminar held in Dodoma region in 1998 focusing on issues on environment conservation for poverty reduction. The seminar was attended by government officials from district to national level from all regions in the country, non governmental organisations, academic institutions, relevant companies, etc. Also, a workshop on Soil Fertility Initiative (SFI) was held in Dar es Salaam in June 2000, which was intended to sensitize stakeholders on best use of agricultural land using zero tillage practices. Another useful workshop was held in Dar es Salaam. This was aimed at developing strategies for disposal of banned agricultural chemicals.

2.4 Ministry Policies and Cross Cutting Issues

Due to lack of clear policy and regulation on OA, different ministries and other government institutions (annex v) abide with the OA concept and rules through the cross cutting issues which have to be taken care off to comply with the principles of IFOAM. Cross cutting issues are under active consideration for the agricultural sector development strategy to promote

linkages between agriculture and other sectors that are important for OA development. Some of the cross cutting issues are as follows: -

2.4.1 Gender

The majority of farmers are women, who contribute about 56% of the labour force employed in agriculture. Women are a disadvantaged group in terms of education and cash opportunities, limiting their potential contribution to leadership roles and decision.

2.4.2 Environment

Tanzania has adequate institutional and legal framework for environmental management, under the Minister for Environment in the Vice-President's Office.

2.4.3 High Morbidity and Mortality rates due to HIV/AIDS, Malaria and Waterborne Diseases

The vulnerable group to HIV/AIDS is the economically active group of people in the society, particularly women. It has affected seriously some communities in terms of production and has resulted to a serious rural poverty. Malaria kills approximately 100,000 Tanzanians annually. This effect has a significant impact on rural productivity. Waterborne diseases also debilitate and kill many farmers.

2.4.4 Land Tenure

The system of land tenure is among the causes of problems that limit agricultural development in the country, due to uncertainty of the land ownership by users, which in some cases has resulted in conflicts over land. The existing legislation is not adequately disseminated to the end users, and therefore neither sufficiently understood nor applied.

2.4.5 Water, Forestry and Wildlife

The natural resources contribute to one third of the rural incomes and they have direct interaction with agriculture. In many rural areas, forestry and wildlife link closely with agriculture. The relationship may, however, not always be well functioning. It is clear that expansion of agriculture can cause forest destruction and loss of wildlife habitat.

2.4.6 Energy

Most rural area dwellers depend entirely on fuel wood as source of energy; this in turn has a significant impact on agriculture and environment. Furthermore, only one percent of the rural

population has access to electricity. This situation negatively affects investment in agriculture related activities.

2.4.7 Communications

Communication is an important area in development of agriculture. Currently the country is experiencing rapid macroeconomic progress due to installation of digital telephone networks, mobile telephone facilities, availability of internet and e-mail services. Some mobile telephone services are already available in a number of rural areas.

2.5 Institutions/organisations Supporting OA

2.5.1 Involvement of institutions in promoting OA

There are some institutions, organisations and programs in the country that are involved in promotion of OA. These include KIHATA, Tanzania Organic Foundation (TOFO), Envirocare, PELUM, Export Promotion of Organic Products from Africa (EPOPA), Board of External Trade (BET), Tanzania Chamber of Commerce, Industries and Agriculture (TCCIA), Sunnhemp Seed Bank, Tanzania Association of Women Leaders in Agriculture and Environment (TAWLAE), TOAM, TanCert, ADP Mbozi and Inades Tanzania. BET is also responsible for disseminating information to potential exporters of various certified organic products on market opportunities in Europe.

Similarly, some academic institutions like the Sokoine University of Agriculture (SUA) are keen to promote organic farming through farmers' education for creating awareness. Under the same institution various research projects on OA were carried out at different academic levels.

Other institutions that support OA include the Kilimanjaro Agricultural Training Centre (KATC), Ministry of Agriculture Training Institute (MATI) Ilonga (Kilosa District), Ukiriguru (Mwanza), MATI Tumbi (Tabora), Irete (Lushoto district), Mogabili (Muleba district) and Igabilo (Tarime District). These institutions conduct tailor made OA courses. Normally, the government provides these institutes with the OA curriculum and the course performance certificates. Currently the MAFS is developing a curriculum for commercial crops. These are coffee, cashew nuts and pyrethrum. The curriculum for coffee is completed.

2.5.2 Export Promotion of Organic Products from Africa (EPOPA)

EPOPA, a program created by the Swedish International Development Cooperation Agency (Sida) in 1994 involved with trade, agriculture and environment issues. EPOPA started operating in the country in 1998. Activities carried out include; mobilizing farmers into group certification, conducting field officers/farmers training, providing inputs to farmers, product quality management, facilitating stakeholders' participation to trade shows and in information dissemination. EPOPA supports projects in technical assistance, and setting up of internal control system to facilitate organic certification.

2.5.3 Tanzania OA Movement (TOAM)

TOAM, the OA movement body for Tanzania, was registered and launched recently (June 2005). The main tasks of TOAM are: Mobilisation of stakeholders lobbying and advocacy. Other activities include facilitation of research, training and extension in OA; facilitation of cooperation and networking among stakeholders and facilitation of local market development in Tanzania.

In early November 2005, TOAM in collaboration with EPOPA, organised a workshop for developing a 3 years strategic plan covering OA promotion, training, marketing, developing appropriate OA technologies, awareness creation to the public etc. TOAM, in collaboration with EPOPA and TanCert this year participated in the Dar es Salaam International Trade Fair, as well as the Farmers Agricultural Show in Mbeya region (Nane nane show). TOAM also participated in the preparation of the *Kick off Study Organic* which was commissioned by UNEP/UNCTAD and conducted by Grolink.

3.0 Status of the Organic Sector in Tanzania

3.1 Crop production

There are few certified organic producers in the country (See Box 1). Besides, there are small groups of farmers and some estates producing organic tea, honey, cotton, coffee, cocoa, peanuts, spices, pineapples, etc. Various studies indicate that the area under certified organic production is more than 14,500 ha (about 0.0015% of the arable land) and the number of certified farmers is estimated at 30,000. The number of farmers at the point of registration is often high but with time it appears there are some dropouts for reasons which are not yet established. For example, in the year 2002 an organic cocoa project had 16,000 farmers, but by

the year 2004/05 the farmers had declined to 3,500. Likewise, an organic coffee project which started with 5,000 farmers had about 1,500 farmers in 2004/05. This situation must be critically studied in order to handle the matter correctly to avoid disappointment to farmers.

There are about 16 known firms operating in the country; a list of some stakeholders with contact addresses is appended (Annex IV). The increase in the number and variety of stakeholders could be explained by the fact that assurance on the availability of a growing market in the organic business has built confidence to farmers, coupled with the advantage that companies dealing with OA create employment to people; for example, the cashew nut project, employs approximately 1,500 women in cashew nut processing.

Box 1		
Organic production in 2002 by some firms		
Firm	Farmers	Yield MT
Biolands	16,000	NA
KCU	3,500	470
KNCU	5,000	400
PCI	500	400

Table 1(a) provides a profile of organic certified production from few recorded certified farmers. However, there is a difficulty in obtaining data due to difficult mechanisms for data collection and unwillingness of some operators to provide information.

The crops grown are chosen based on market demand, and ease in handling, e.g. drying. Some crops, such as spices have multiple products. These are used for spicing food and for the production of essential oils. Most organic products are exported to Germany, The Netherlands, Sweden, Japan, Switzerland, United Kingdom (UK), Indonesia and United States of America (USA). Most of the products are sold in semi-processed or raw forms.

Table 1(b) shows an increasing trend in uncertified organic production, indicating that there is a high potential for OA growth in this area. Surveys indicate that uncertified farmers have more than 200,000 ha. Tables 1(b), 1(c) and 1(d) present some crops/products that are not certified. However, vanilla produced in Kagera region is certified and sold to USA through Uganda.

There are about 15,000 beekeepers in Handeni District, owning 69,874 traditional beehives and 1,140 box hives that produce more than 150 MT of honey and 10 MT of beeswax. The beekeeping projects are in Negero, Suwa and Mswaki divisions. The Handeni District Council

is promoting and facilitating investment in beekeeping to benefit from the market opportunities in the world market. The world market is estimated to buy more than 300,000 MT of honey. Therefore the number of certified farmers in the near future is likely to increase to more than 40,000, as there are other companies that are interested in investing in OA - such as the Organic Cotton Project (ECOL).

3.2 Livestock Development

Tanzania has about 18 million heads of cattle (Year 2003/04 data). The majority are indigenous cattle that are naturally grazed. It is assumed that the potential organic meat, comes from this group of animals. It is also estimated that there are 12,556,000 heads of goats and 3,521,000 heads of sheep.

3.3 Marketing of Organic Products

There is an increasing demand in foreign markets of various organic products. The limitations so far have been production of small amounts, and inconsistent supply. The small quantities sold in the local market are from uncertified farmers, and are to a large extent sold as ordinary products (not labelled organic). Some products that are naturally produced are sold locally at higher prices (50-100%) than products produced conventionally, e.g. local chicken, local chicken eggs, etc.

To a large extent OA production is a market-oriented business and privately driven. To confirm orders the interested buyers sign contracts with growers. In general, 100% of the certified organic products produced are exported to countries like Germany, UK and USA. It is estimated that more than 2,000 MT of organic products are exported from Tanzania annually. Certified farmers sell their produce for up to 50% of the premium price. For example, coffee that is sold in the fair trade attains a premium of up to 50%. In general terms incomes of farmers practising organic farming range between TZS 200,000 and 1.0mill. annually, whereas more than 50% comes from organic products.

Organic cotton is another example, the crop attains a premium price of 32%. For the past three years (2000/01-2003/04) prices have been increasing from USD 1.4 - 1.6 per kg compared to staggering prices of conventional cotton (Refer Table 2). The only company currently involved in organic cotton production is Biore Tanzania Ltd. However, there are other companies showing interest in investing in this area as well, e.g. ECOL.

Production and exported volumes of spices from Zanzibar for 2003/04 to Germany as recorded from one firm for the purpose of indicating prices and productivity are presented in Table 3. However, generally there is a significant difference between farm-gate prices and selling prices at the export market; and the prices offered for export is higher than in the local market.

Price fluctuation often occurs in conventional crops like coffee and cashew nuts etc. When this happens in OA, farmers adapt to the price changes by selling to alternative buyers even if they are to sell as conventional products, provided the conventional product has higher price. The cooperatives' unions also would react by buying the product at market price. Normally the cooperative unions buy products at an average price, then a second payment is made to farmers after the sale of the product.

3.4 The Local Market for Organic Products

The Local market is not well developed due to lack of awareness by the consumers on the importance of healthy foods. Supermarkets could be an entry point whereby a window of organic products could be created. Currently there are a few organic products in supermarkets like Imalaseko and Shoprite, and some groceries e.g. Mums kitchen in Dar es Salaam, Muthoni, Montessori – Lushoto, Peramiho, etc. The products are mainly from uncertified suppliers. Likewise there are some NGOs and farmers' groups producing and selling uncertified products for the local markets; these include, Mkuranga women group vegetable growers that sell vegetables and Kilimanjaro Natural Food Cooperative Society (KNFS) which deals with dried fruits and vegetables.

3.5 Export strategy and Market Penetration

The OA sector's export target markets are: The Netherlands, United Arab Emirates, and United Kingdom. Various strategic directions have already been determined so as to enhance Tanzania's entry and position on these markets, The organic products will be produced in conformance to the market health and safety standards, and meeting basic requirements with respect to Code of Practice- Good Agricultural Practice (EUREPGAP), Hazard Analysis Critical Control Points System (HACCP), and Minimum Residues Level (MRLs), since the products will be produced under ethical, safe and environmental friendly working conditions. In this regard, capacity building of farmers and traders appears to be crucial for successful production and marketing of the products.

3.6 Indigenous Knowledge

Currently there are no formal technical skills in support of OA. Most farmers use their traditional knowledge in solving various problems and utilizing the available opportunities. Of late, several research institutions (e.g. Animal Diseases Research Institute (ADRI) under the Ministry of Water and Livestock Development) and NGOs are working on various issues like utilization of local natural pesticides or products (e.g. neem, *Aloe barteri*, cows' urine, ash, etc.) in control of disease and pests (See Box 2 below). Some NGOs, e.g. PELUM and Envirocare have documented the farmers' experiences on indigenous knowledge.

Box 2	
Some natural pesticides and their uses	
Product	Control
Neem leaves	-Disease and pests of plants e.g. banana weevil, nematodes
Neem oil	-Pests e.g. bruchids and sitophilus in stored grains
Garlic	-Pests of crops e.g. army worms
Chilies	-Pests of crops
Milk	-Control of fungal diseases in vegetables
Cows urine	-Pests of plants e.g. vegetables
Wood ash	-Insect pests of plants e.g. lady bird beetles, aphids
	-Pests in stored grains
Lime	-Pests in stored grains
Soil dust	-Pests in stored grains
Tobacco	-Insect pests of plants
Doum plant	
<i>Aloe barteri</i>	-Termites
Dry cow dung	-Pests and diseases of plants e.g. fungus, aphids and cutworms
<i>Tephrosia vogelii</i>	-Pests of plants and in stored grains
<i>Tagetes minuta</i>	-Pests of plants e.g. root knot nematodes, termites, caterpillars

Local knowledge should be valued and promoted particularly in preservation of local agricultural seed materials, identification of products for control of diseases and pests, and crop management skills. Different people in different communities have different levels and types of traditional knowledge and skills but they are not adequately documented and shared.

3.7 Certification of OA products

Official interest in OA is emerging in Tanzania. Up till today, there has not been official legislation or certification body for organic products. Most of the farmers have taken the trouble to obtain organic certification because of the pricing premium that exists for most crops which are certified as being grown organically. Thus, it is quite some time now, since foreign

companies started inspection and certification activities in the country with their own inspectors from abroad, and with the costs involved being borne by farmers. Currently there are five foreign certification bodies in the country. These include IMO of Switzerland, Naturland of Germany, SACert of UK, EcoCert of France/Germany and Bio inspecta. TanCert, the first local organic certification body, was established in 2004. Its role is to provide inspection and certification services for the local and international market - inspection services that monitor and evaluate organic production system used among producers and processors (operators). Further, TanCert provides a logo for organic products and information for organic production and marketing. See Box 3 below on the History of OA Development Process in Tanzania.

The foreign certifiers used to charge a certification fee at a rate ranging from USD 150 to USD 450 per day while TanCert charge between USD 100-180. In this case local certification facility appears to be a solution to the high certification costs borne by farmers. In an effort to build local capacity, 32 local inspectors from Zanzibar, Morogoro, Iringa (Njombe, Ludewa), Dodoma, Mbeya, Dar es Salaam and Ruvuma were trained by GroLink consultant under Sida support. Likewise, courses on OA were conducted in the country by GroLink, and more than 45 stakeholders were trained on OA principles.

Box 3	
Tanzania OA Development Process	
1990s	-Dialogue on certification initiated -ITC carried out several marketing studies on OA
1998	-EPOPA activities started in the country
2001	-IFOAM Anglophone conducted a workshop on establishment of standards and certification system
2002	-Sida conducted a feasibility study on the establishment of certification bodies for OA in East and Southern Africa; a study on organic coffee information system -ADP Mbozi, Pelum and KIHATA organised a stakeholders' workshop to initiate standards and certification process
2003	-Preparation of short and export standards
2004	-TanCert registered -CBTF held a national multistakeholder consultations to discuss the possibility of launching a CBTF project on promoting production and trade of organic agricultural products in East Africa
2005	-TOAM registered -UNEP/UNCTAD conducted IA of OA

3.8 Organic Agricultural Standards

3.8.1 Official National Standards Body for Tanzania.

Tanzania Bureau of Standards (TBS) is Tanzania's sole standards body, established by Act of Parliament No. 3 of 1975, and subsequently amended by Act No. 1 of 1977. TBS is a Parastatal organization under the Ministry of Industry and Trade. TBS is one among 99 such other bodies in the world that are members of the International Organization for Standardization (ISO).

The main functions of TBS include

- (a) Formulation and promulgation of Tanzania standards in all sectors of the country's economy. Priorities have been established for national standards in the fields of textiles, leather, agriculture and food, chemicals – which does include OA, engineering and the environment.
- (b) Implementation of the promulgated standards through third party Certification Schemes.
- (c) Quality improvement of industrial products both for local consumption and export through various certification schemes like pre-export and -import inspection and testing, the tested product certification scheme and quality system registration.
- (d) Undertaking the testing of product samples drawn by TBS inspectors in the course of implementing standards (certification samples) or as requested by manufacturers (type-testing).

In as far as OA is concerned, TBS has developed a national standard to provide a national framework (a standard for standards) to serve as guidelines on OA standards for the production, processing, marketing, and labelling of organically produced foods. These guidelines define the nature of organic food production and prevent claims that could mislead consumers about the quality of the product or the way it was produced.

Since Tanzania does not have national regulations on OA, the position of TBS at present on standardization and certification in the organic sector is to define the ground rules of the practices in organic production, in exercise of national sovereignty. TBS may not necessarily become involved in the implementation of these rules at all levels. In this regard, Inspection will be carried out by Certification bodies, private or otherwise, while Accreditation of the Certification bodies will be supervised by TBS as the government authority responsible for guaranteeing public interests.

3.8.2 Private OA Certification Bodies

At present Africa has only eight private organic certification associations, the eighth being the Tanzania Organic Certification Association (TanCert). Currently there are two OA private standards developed by TanCert, based on the International Forum for OA Movement (IFOAM) standards. These are:

- (a) Short Standards for Organic Production in Tanzania. They cover a general introduction, definitions of terms, general principles and standards, animal husbandry, bee keeping, processing and handling, labelling, handling and storage, and labelling of products.

The Organic Short Standards are simple and can easily be understood and adopted by small scale farmers. They are presented as simple minimum requirements that an operation must meet the TanCert Organic Standards, particularly for the domestic market.

- (b) The TanCert Organic Standard - the long standard for the export market. It is presented as General Principles, Recommendations, and Standards. General Principles are the intended goals of organic production and processing. Recommendations are practical suggestions for operators to implement on the organic farm, and the Organic Food Processing Standards are the minimum requirements that an operation must meet to be certified to the TanCert Standards. The standard is being used for the certification of organic production in Tanzania, and productions that meet the requirements of the standard can carry the “Hai” logo for organic products.

There are initiatives which are underway, by the private sector to harmonise organic standards in the East African sub-region and create a common East African certification logo.

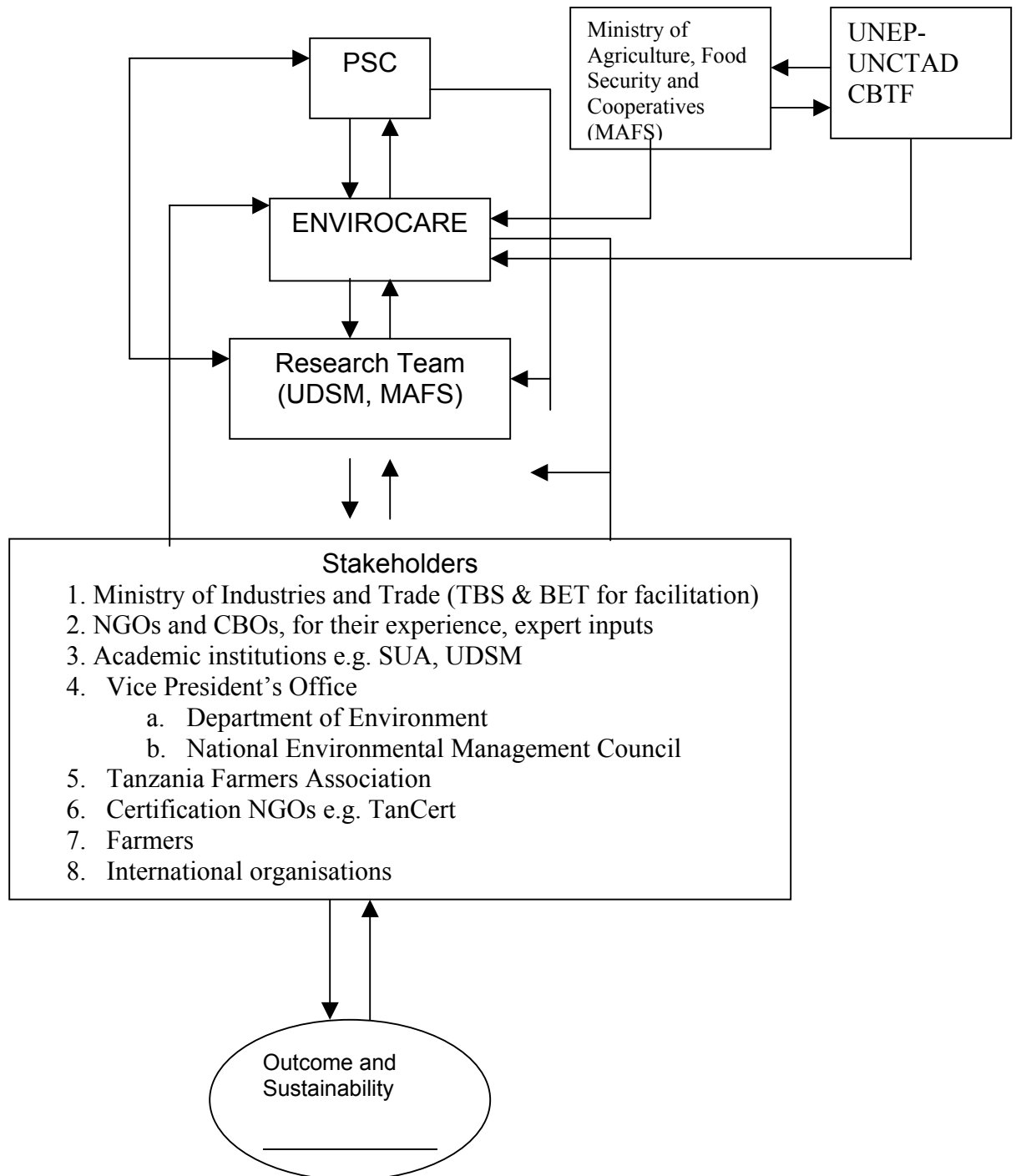
4.0 OA Stakeholders Analysis

4.1 Participatory Process for IA in OA in Tanzania

SWOT analysis (See Table 4) provides indication on the status of OA in the country. In this regard, the potential for OA in Tanzania cannot be overemphasised.

Below the Participatory Framework indicates how different stakeholders will be involved in the IA process. (*Annex vi elaborates in detail the involvement of OA stakeholders*).

Participatory Framework



5.0 High Potential Crops for the IA Study.

Since the IA study requires crops with highest potential that should be assessed, five crops have been selected which later narrowed down to three for easy assessment. Therefore, coffee, cashew and honey were selected for further assessment. The selection of these crops based on the criteria that were set by the National Steering Committee Member as follows:

Data availability - meaning if there are existing records of production, income, stakeholders involved and diseases incidences.

Benefits - meaning the maximum benefits that can be obtained to the environment, social and economy by producing the selected crops organically.

Distribution - meaning the number of regions that are cultivated and number of individuals which are involved directly and or indirectly.

Market demand – local and external markets, in relation to the extent of production

Production expansion potential – meaning if there is any possibilities of expanding the crops in case of increased demand and willingness of farmers to produce.

Environmental impact – meaning the impact that a certain crop have during production on the environment, e.g. use or not use of pesticides.

Indigenous knowledge – meaning to what extent local people knows how to treat or care the selected crops without relying so much on outside technology.

Therefore: - coffee, cashew and honey were among the crops that scored high (as indicated on Table 5) because of the high possibility for expansion and large population that is involved. Their demand is good and the price in the world market is very fair. Cashew and coffee are among the crops that use a lot of pesticides, so once produced organically the environment will benefit from less pollution by pesticides. Production of organic honey will also require people to avoid use of pesticides and taking care of forests. The table below indicates the score and crops that were involved on the process.

6.0 Constraints to Organic Agricultural Production and Trade

An EPOPA study analyzed the views of the stakeholders and found some limiting factors that hindered the development of OA in the country. The problems are recorded in Box 4 below.

Most operators indicated that certification costs were very high and that this increased operation costs significantly. The lack of capable farmers and extension workers was emphasized as a serious setback. It is important in an out-grower set up to increase organic production knowledge.

Box 4	
Summary of Problems Limiting OA Development	
(Each company could mention several problems)	
Problem	Frequency
High costs of certification	3
Lack of knowledge on OA amongst out-growers	3
Soil improvement inputs are limited because farmers do not know how to process products like organic fertilizers	3
Little support for organic development from the government	2
Lack of organic/natural pesticides for disease and pest control	2
OA production is labour intensive	2
High transportation costs	2
Insufficient supply of organic products (too little is produced)	1
Lack of quality control facilities	1
Lack of credit facilities	1
Lack of markets particularly the local market	1
Charges imposed on crops increase farmers' burden	1

Source: Basic Data on Certified Organic Production and Export in Tanzania 2003
www.epopa.info 10 (14)

7.0 Summary

The potential for OA in Tanzania is enormous. In the future there are chances that organic products could be sold on the farms, in health food shops, farmers' markets, at community supported agribusinesses, box schemes, supermarkets, organic super markets, to catering institutions, public procurement (schools and hospitals) and eco-tourism arrangements.

Furthermore, organic products are at high demand on the world market, and they sell at premium prices compared to conventional products. In this case organic production is among the priorities Tanzania could take in the development of agriculture to increase export earnings.

Apart from the great potential Tanzania has, like any other developing country she is also facing various challenges in undertaking OA as a business due to various limitations. There are several traditional practices useful for OA, e.g. practices on crop protection, but their utilization is very limited. A step onward from this point is to enable such practices to be scientifically tested, improved and disseminated to the stakeholders. A lack of such procedure can also be noted in agro-processing as it is still very much underdeveloped. It is recognized that Tanzania processes hardly 1% of the produced crop quantities, due to lack of capital, modern equipment and marketing skills. Other challenges in developing OA include; astringent export procedures and market requirements e.g. EUREPGAP, HACCP; lack of reliable consumer market, particularly the local market; limited knowledge on OA; inadequate extension services, as most of the extension staff have limited knowledge on OA; lack of a mechanism for generating farm data by farmers, particularly the uncertified farmers. In addition, some certified operators are unwilling to issue data/information on their activities.

8.0 General Recommendations

1. Capacity building is an important area if the target is to increase production of quality crops in order to tap the available market opportunities. In practicing private-public-partnership (PPP) which the governments is striving to achieve, the OA operators (firms) could recruit their own technical personnel, while the government train extension staff and farmers on OA principles, and firms can provide technical support as necessary. This should go hand-in-hand with sensitization of farmers and support in developing appropriate technologies to stimulate massive production.

2. Conducting market research of organic products is an important task to determine the local market demand.
3. The responsible authorities for registration of pesticides should review the registration procedures to enable organic/natural pesticides easier registered.
4. Based on the criteria set for the IA study, the proposed crops for study are coffee, cashew and honey. These crops will give an indication on the potential for developing the organic sector. These crops involve large groups of farmers hence the output of the study will benefit many people. Other IA studies that have been carried out in the country could provide valuable experience.

9.0 References

1. Agricultural Policy (1997): Ministry of Agriculture and Food Security, Dar-Es-Salaam.
2. Agricultural Policy and the Role of Private sector in Agricultural Production (2005): A Policy Paper for the Ministry of Agriculture and Food Security.
3. Agricultural Sector Development Strategy (ASDS), Ministry of Agriculture and Food Security (MAFS), October 2001.
4. Agricultural Sector Development Strategy (ASDS) Ministry of Agricultural and Food Security (MAFS). 2003.
5. A. Mwashu (2002). Status of OA in Tanzania. A paper presented to the workshop on the development of OA held on 9-20/7/2002 in Bangkok. Thailand.
6. A.M. Mwashu (2004). Country Perspectives on National Policy Intervention on OA in Tanzania. A paper presented to the workshop on policy options for increasing the role of OA in ensuring sustainable food security in Sub-Saharan Africa held on 30-31st March 2004 at International Conference Centre, Kampala Uganda.
7. A Report on Positioning for facilitating Tanzania Commitments in Agriculture Negotiations. University of Dar- Es- Salaam. Tanzania. March 2003.
8. Bank of Tanzania. Economics Bulletin for the quarter ended 31st March, 2001. Vol.XXXI No. 1.
9. Beekeepers to Cash in on Organically-farmed Products; In Business Times Newspaper; of 14-20/10/2005
10. EPOPA OA Progress report 2002. Dear Es Salaam
11. EPOPA (2004). Basic Data on Certified Organic Production and Export in Tanzania. Dar-Es-Salaam
12. Envirocare, 2004. Kilimo Hai Tanzania: Kiongozi cha Mwezeshaji. 2004. Supported by HIVOS
13. Envirocare, 2005. Kitabu cha Madawa ya Asili kwa Wanyama na Mimea. Supported by HIVOS
14. Financial Times. 17.08.2005; 19:23. Tanzania set to Produce First Organic Cotton this year. A press release issued by ECOL.
15. IA of Pastoral Wildlife Interactions in East Africa (GL-CRSP) Project) Annual Report 2003 A-AARNET ASARECA Animal Agriculture Research.

16. Internet source. www.grolink.se/Resources/Studies
 www.grolink.se/Epopa/Publications
17. IFOAM Press Release on OA Principles Review. September 2005 in Australia
18. Knowledge of the land: Land Resources Information and its use in Rural Development by; Barrland Dalal-Clayton, David Dent, DB Dala Clayton. Oxford University Press. 2001. Environmental studies
19. K.S. Mwashu (2000). Priority Products and Markets.
 A paper presented to the JITAP Natural Symposium and high-level seminar on Trade policy measures, 18-19 May 2000.
20. N. Parrot and B. Elzakker (2003). Agro Eco Report: Organic and like minded movements in Africa: Development and status: IFOAM.
21. Organic Food and Beverages: World Supply and Major European Markets.
22. OA Development: A brochure for Advanced International Training Programme 2006. Sunne, Sweden 28July-17August 2006; in Africa 9-22 January 2007.
23. OA World Wide: IFOAM Directory of the member organizations and associates. IFOAM 2003.
24. UNEP/UNCTAD-CBTF Project document on Promoting Production and Trading Opportunities for Organic Agricultural Products in East Africa (2005).
25. Rainard Mjunguli (2004). Opportunities for Domestic Organic Market in Tanzania. A Rapid Market Scan Carried out for EPOPA Tanzania with backstopping from Maker Associates Ltd . Dar es Salaam Tanzania
26. Sustainable Agriculture Solutions: The Sustainable Agriculture Initiative Action Report. Published by the Novello Press Ltd, London 1999.
27. Tanzania Mainland: Basic Data Agriculture Sector 1993/94-1999/2000.
 Ministry of Agriculture and Food Security.
28. World Markets for Organic Fruit and Vegetables: Opportunities for developing countries in the production and export of Horticultural products. CTA, ITC, FAO. ROME, 2001

Annexes

Annex I. Questionnaires for farmers, processors and exporters

Questionnaires

1. Name and address of the company/organization dealing with OA

P.O.Box _____
 Fax: _____
 Tel _____
 e-mail: _____
 Contact person _____
 Mobile No: _____

2. Crops produced/processed/exported:-

Why this crop/product was chosen

i) _____
 ii) _____

Table 1. Crop/Product Production, Internal and External Marketing for the year 2003/04

S/ N	Crop	Where produced	Production (MT)	Productivity (MT/Ha)	Internal market			External market		
					Qty	Price	Destination	Qty	Price	Destination

Table 2. Crop/Product Production, Internal and External Marketing for the year 2004/05

S/ N	Crop	Where produced	Production (MT)	Productivity (MT/Ha)	Internal market			External market		
					Qty	Price	Destination	Qty	Price	Destination

3a. Is there any price changes for the organic products in the last 3 years?

3b. How have you adapted to price fluctuations?

4. What are the key trading partners for your organic produce?

5. Which Organisation(s) certifies/certify your product(s)

a) _____

b) _____

6. What is the national demand for organic products?

7. What problems are encountered in organic farming/exporting organic products?

a) _____

8. What suggestions can you make to improve OA in the country?

a) _____

9. What can you comment on the local market for organic products?

10. Identify constraints affecting organic agricultural production and trade:-

i) Production

ii) Marketing

iii) Institutional

11. Do you know any study on OA that has been conducted in the country? If the answer is YES. Please, fill in the table below.

S/N	Title of the report	Year	Methodology used	Organisation/Institution conducted the study/assessment

12. Mention the key players you know in OA in Tanzania.

S/n	Name	Organisation/firm	Type of business	Contact address	Tel: Fax: Email:

13. Which districts are believed to have particular advantage for organic production?

- a) _____ b) _____
c) _____ d) _____

14. How many peasants are involved in organic production under your organization/company?

15. General Comment(s)

Annex II. Questionnaires for the OA Supporters/Promoters

Questionnaires

1. Name of the respondent: _____
 Organisation/Place: _____
 P. O. Box _____
 Fax: _____
 Tel _____
 e-mail: _____
 Mobile No: _____

2. What different crops are produced organically and why?

Reason

- a) _____
 b) _____

3. Where are they produced organically?

4. What are the geophysical characteristics of these places?

5. Which districts are believed to have particular advantage for organic production?
a) _____ b) _____
c) _____ d) _____
6. How many peasants are involved in organic production?

7. What percentage of the total organic produce is estimated for domestic consumption?

8. What percentage of total organic produce is for export, including boarder trade?

9. Who are the key trading partners for organic produce?
a) _____ b) _____
10. What have been the price changes (domestic and international) for major organic products in the last 3 years?

11. How have the OA farmers adapted to the price fluctuations?

12. What are the programmes supported by external institutions, including research?

13. Which research institutions have special programmes and expertise in OA?

14. What are the key criteria for classifying and certifying organic products?

15. Which institutions are involved in classification and certification?

16. How are you describing the demand of organic products in the local markets?

17. Who are involved in storage, transportation, and market of organic products?

18. Identify constraints affecting organic agricultural production and trade:-
iv) Production

- v) Marketing

- vi) Institutional

19. Do you know any study on OA that has been conducted in the country? If the answer is YES. Please, fill in the table below.

S/N	Title of the report	Year	Methodology used	Organisation/Institution conducted the study/assessment

20. What to be done to promote OA in Tanzania?

21. Any comment(s)

Annex III: Studies on OA Conducted in Tanzania

S/N	Title of the report	Methodology used	Individual/ Organisation/ Institution conducted the study/ assessment
1	Feasibility study on the establishment of certification bodies for OA in Eastern and Southern Africa. Commissioned by Sida/INEC; 2002.	-Desk work (secondary data) -Interview with actors -Missions to study countries e.g. Kenya, Tanzania, Namibia, South Africa etc	Sida
2	A feasibility study on organic coffee information system. A study Report: 2002.	-Questionnaires to certifiers -Country studies (survey with questionnaires) -Internet -Personal interviews	Sida
3	Basic Data on Certified Organic Production and Export in Tanzania; 2004	-Questionnaires -Secondary data -Interview	EPOPA
4	The European market for organic cashew nuts. Summary of a market study: 2002.	-	EPOPA
5	Opportunities for Domestic Organic Market in Tanzania: Rapid Market Scan Carried out for EPOPA Tanzania. 2004	-Review of secondary data -Interview with suppliers and consumers -Use of questionnaires	EPOPA
7	Waste composting for urban and peri-urban agriculture closing the Rural-Urban Nutrition cycle, 2002.	A book (comprise of various findings)	City Commission, Dar es Salaam, Tanzania
8	Effects of Green Manure and Compost Amended with Phosphate Rock on Soil Properties, Yield and Quality of Amaranth and Tomato; 2004 at SUA.	PHD Thesis	Dr. Ruth Minja
9	<i>Kitabu cha Madawa ya Asili kwa Wanyama na Mimea. 2004</i>	Experiences gathered from farmers and various literature	Envirocare/Norwegian Embassy
10	<i>Kilimo Hai Tanzania: Kiongozi cha Mwezesaji. 2004</i>	Adopted from IFOAM training Manual	Envirocare, IFOAM, HIVOS
11	<i>Mizania ya Uzalishaji wa Mahindi kwa Njia ya Asili</i>	-	Sunn hemp, Peramiho; Songea
12	<i>Matumizi ya madawa Asili: Kulinda Mimea Shambani Na.1 Ujuzi wa Wakulima</i>	Interviewing farmers on local knowledge	Inades Formation Tanzania
13	<i>Kulinda Mimea Shambani Kwa Kutumia Njia za Asili. Na.2. Ujuzi wa Wakulima</i>	Interviewing farmers on local knowledge	Inades Formation Tanzania

Annex IV. List of Stakeholders/Actors Involved in OA

OA Producers/Exporters/Traders

S/N	Firm	Crop type and status	Source (district/Region)	Export Destination/Status
1	KNCU ¹	Coffee	Kilimanjaro	Certified
2	MTC ²	Processed tea	Njombe	Europe
3	Zanz-Germ ³	Ginger, pepper, turmeric, chili and lemon grass	Kigoma (ginger), Tanga (pepper) and Zanzibar	Germany
4	PCI ⁴	Cashewnuts	Mkuranga (Coast region)	UK, USA
5	CSOD ⁵	Lemon grass oil, cinnamon leaf oil, eucalyptus oil and sweet basil oil	Zanzibar	Switzerland
6	KCU ⁶	Clean coffee (robusta)	Bukoba rural, Muleba (Kagera region)	Sweden, Germany, UK
7	Biolands ⁷	Cocoa	Kyela district	EEC, USA
8	KNFCS ⁸	Dried mangoes, hibiscus, mushroom, ginger, banana and garlic	Kilimanjaro region	Sells locally
9	Matunda Mema	Dried fruits	Bukoba district	Germany
10	TANPRO	Peanuts	Sumbawanga district	NA
11	ECOL	Cotton	Handeni, Morogoro, Dodoma	NA
12	Njia Moja Ushirika Group,	Cloves, turmeric, cinnamon, black pepper, vanilla, lemon grass	Pemba	Indonesia, Japan through ZSTC
13	ADP Isangati	Dry turmeric	Mbeya	Germany
14	Bombay Birmah Tea	Tea	Tanga	NA
15	KIWAKABO Tema	Coffee	Moshi	Not yet certified
16	Kibidula	Lemon grass	Mafinga	NA
17	Zanzibar State Trading Company (ZSTC)	Essential oil	Pemba	Indonesia, Japan
18	Kimango Farm Enterprise Ltd	Mangoes, lemon grass	Morogoro	NA
19	Tanzania Tea Packers (TATEPA)	Tea	Dar es Salaam	NA
20	Tanganyika Instant Coffee Company Ltd (Tanica)	Coffee	Bukoba	NA
21	Biore Tanzania Ltd	Cotton	Shinyanga	NA
22	Mikese Organic Farm	Fruits (mangoes)	Morogoro	NA
23	Tanzania Organic Products (TAZOP)	Spices	Zanzibar	Germany
24	Fidahusseini Co.	Honey	Rufiji district	NA
25	MAYAWA	Vanilla	Kagera	Uganda
26	Hamisi Omari	Spices	Muheza district	Agent for spices buyers
27	Ramadhani Ngosha	Spices	Muheza district	Agent for spices buyers
28	Sunnhemp Seed Bank	Various crops	Songea district	Capacity building

Source: EPOPA Report on Basic Data on Certified Organic Production and Export in Tanzania; October 2004

¹ Kilimanjaro Native Cooperative Union (KNCU) 1984 LTD

² Mufindi Tea Company Ltd

³ Zanz-Germ Enterprises Ltd

⁴ Premier Cashew Industry Ltd

⁵ Clove Stem Oil Distillery

⁶ Kagera Cooperative Union (1990) LTD

⁷ Biolands International; Ltd

⁸ Kilimanjaro Natural Food Cooperative Society

NA = Information is not available

Organic Producers/Buyers/Exporters Contacts

S/N	Name of the Firm	Product	Address	Telephone	Fax	E-mail	Contact Person	Mobile Number
1	Kilimanjaro Native Cooperative Union (KNCU) 1984 Ltd	Coffee	P.O. Box 3032 Moshi	027 2752785	027 2754204	kneu@kicheko.com	Gabriel Lyatuu	0744 604202
2	Tanzania Organic Products (TAZOP) Ltd	Spices	P.O. Box 1594 Zanzibar	024 2236285	024 2236286	tazop@cats-net.com	Khamis Issa	-
3	Mufindi Tea Company Ltd (MTC)	Tea	P.O. Box 5503 Tanga	-	-	-	Rashid Mziray	-
4	Zanz-Germ Enterprises Ltd	Spices	P.O. Box 70192 Dar Es Salaam	022 2123556	022 2123596	muftea@intafrika.com	Dilip Rughani	-
5	Premier Industry Ltd (PCI)	Cashews	P.O. Box 3369 Zanzibar	024 2235048 0747 413934 0747 414574	024 2231817	bensa@zitec.org	Bente Said	0747 413934
6	Clove Siem Oil Distillery (CSOD)	Essential oils	P.O. Box 2272 Tanga	-	-	-	Alawi Mzui	-
7	Kagera Cooperative Union (1990) Ltd (KCU)	Coffee	P.O. Box 816 Dar Es Salaam	022 2844510	022 2843186/ 2843994	hrsh@eastafrica.net	Mushtak Fazal	0744 782872
8	Biolands International Ltd	Cocoa	P.O. Box 337 Pemba	024 2452083	024 2452083	pbadist@africaonline.co.tz	Nassib S. Omar	0747 428825
9	Dabaga Vegetable and Fruit Can Company Ltd	Fruits and Vegetables	P.O. Box 5 Bukoba	028 2220229	028 2221168	kcua@africaonline.co.tz	Rwegasira Morris	0744 409307
10	Kimango Farm Enterprise Ltd	Mangoes, lemon grass	P.O. Box 602 Kyela	025 2540102	025 2540430	lima@atma.co.tz	Eric Smets	0744 366133
11	Tanzania Tea Packers (TATEPA)	Tea	P.O. Box 83 Iringa	022 2130651	022 2115233	dabaga@cats.net.com	Bipin Desai	-
12	Mufindi Tea Estates Ltd	Tea	P.O. Box 642 Morogoro	023 2601220	023 4714	kimone@africaonline.co.tz	Simone Axmann	-
13	Tanganyika Instant Coffee Company Ltd (TANICA)	Coffee	P.O. Box 1344 Dar Es Salaam	022 2863297	022 2865731	chaibora@intafrika.com	John Corse	-
14	Biore Tanzania Ltd	Cotton	Iringa	-	-	muftea@inafrica.com	-	-
15	Mikese Organic Farm	Fruits (mangoes)	P.O. Box 410 Bukoba	028 2220252	-	tanica@twiga.com	Leonard Ishansha	-
16	ADP Isangati	Dry turmeric	P.O. Box 5100 Tanga	027 2643025/ 2642278/ 2696757	-	bioretz@tanga.net biosim@t.online.de	Louis Kapande Saro Ratter	-
17	Bombay Burmah	Black Tea	P.O. Box 1682 Morogoro	0748 495985	-	mikesefarm@yahoo.com	Abdeali Karimjee	-
18	Njia Moja Ushirika Group	Spices	c/o veeco, Mbeya Usambara/Soni, Lushoto	022 2781323 027 2640413	022 278 1335 027 2640493	-	-	-
19			P.O.Box 151 Gondo Pemba	0747 859457	024 2454061	-	-	-

19	KIWAKABO Tema	Coffee	P.O.Box 1567 Moshi	0744 677493	-	tehofo@yahoo.com	-
20	Kibidula		Mafinga	0744 605561	-	Waber.kib@swissonline.ch	-
21	Zanzibar State Trading Company (ZSTC)	Essential oil	P.O.Box 26 Zanzibar	0242231550 0242230272	0242231550	Zanzibarstc@zanzinet.com. malonyo@yahoo.co.uk-distillery	-
22	Zanzibar Organic Products (ZANOP)	Spices	Zanzibar	-	-	-	-
23	Buyer	Spices	P.O.Box Muheza	-	-	Hamisi Omari	-
24	Buyer	Spices	P.O. Box 20 Muheza	-	-	RamadhanNgosha	-
25	ZAFFIDE	Spices	P.O. Box 149 Zanzibar	0747 411426 024 2233394	-	usaimahmoud@hotmail.com	-
26	Matunda Mema	Dried fruits	Bukoba district	-	-	-	-
27	TANPRO	Peanuts	Sumbawanga district	-	-	-	-
28	ECOL Cotton Project	Cotton	Handeni	0746264877	-	nickrmason@hotmail.com	-
29	Fidahussein Co.	Honey	P.O. Box 816 Dar Es Salaam	022 2844510	022 2843 186/ 2843994	hrsh@eastafrica.net	-
30	MAYAWA	Vanilla	Bukoba Kagera	-	-	mayawa@bukobaonline.com	Charles Kamando
31	Mkuranga Women Vegetable Growers	Vegetables	Mkuranga district	-	-	-	-
32	Golden Fruit Products	Ginger in syrup	Arusha	-	-	-	-

Non Governmental Organisations/Community Based Organisations/Programs Contacts

S/N	Name	Address	Telephone	Fax	E-mail
1	KIHATA	P.O.Box 747 Morogoro	023 4125	-	-
2	EGAJ	P.O.Box 1570 Dodoma	026 2354939	026 2324750	egaj@ucc.co.tz
3	Inades Formation Tanzania	P.O.Box 203 Dodoma	-	-	-
4	PELUM -TZ	P.O.Box 54 Dodoma	0262350744	026 2354722-	pelumtz@maf.or.tz
5	Sunnihemp Seed Bank	Songea	0748 8366056	-	-
6	ADP Mbozi	P.O.Box 204, Mbozi C/o veco, Mbeya	022 2781323	022 278 1335	-
7	Envirocare	P.O.Box 9824 Dar es Salaam	022 2701407 022 2775592	022 2701407	envirocare@bol.co.tz
8	TOAM	P.O.Box 105575 Dar es Salaam	022 2771374	022 2771374	-
9	TanCert	P.O.Box 70089 Dar es Salaam	0748 490 275	-	lm@TanCert.org
10	TAWLAE	P.O.Box 76498 Dar Es Salaam	022 2700085	022 2700090	tawlae@arim.ur.tz
11	MVIWATA	P.O.Box 3220 Morogoro	023 4184	023 4184	mviwata@africaonline.co.tz
12	EOPA	P.O.Box 105575, Dar es Salaam	022 277 1374	022 277 1374	-

Annex V: Government Ministries and Institutions that are involved in OA sector

S/N	NAME
1	Ministry of agriculture and Food Security
2	Ministry of water and Livestock Development
3	Ministry of Cooperatives and Marketing
4	Vice Presidents Office: Environment Department
5	Prime Minister's office: Region Admin. and Local Government
6	Ministry of Industry and Trade
7	Board of External Trade (BET)
8	Sokoine University of Agriculture (SUA)
9	Tanzania Food and Drug Authority (TFDA)
10	Tanzania Bureau of Standards (TBS)
11	Tropical Agricultural Research Institute (TPRI)
12	Kilimanjaro Agriculture Training Centre (KATC)



Promoting Production and Trading Opportunities for OA in Tanzania

The Participatory Process for the IA of OA in Tanzania.

Introduction

Envirocare in collaboration with the Ministry of Agriculture and Food Security and other stakeholders are coordinating a project focusing on the promotion of production and trading opportunities for OA in Tanzania. This is the 18 months project and is a part of the bigger national initiative that is supported by United Nation Environmental Programme (UNEP) - United Nation Conference on Trade and Development (UNCTAD) Capacity Building Task Force on Trade, Environment and Development. This project involves a series of stakeholders meetings, workshops and assessment studies for provision of information.

This is a participatory process designed and intended to set out the methodology or strategies that will be adopted to ensure involvement of stakeholders during the IA initiative. The purpose of the participatory process is to ensure that the initiative reflects the concerns and priorities of different government ministries, affected communities, private sectors, academic institutions, civil societies and other stakeholders.

Objectives

The overarching objective of this project is to contribute to sustainable trade, environmental protection, food security and poverty reduction in three East African countries (Kenya, the Republic of Tanzania and Uganda) by promoting the production and export of organic agricultural products.

Specific objectives include to:

- Facilitate vibrant and continuous national and regional multistakeholder dialogue among all relevant parties, including representatives from the ministries of agriculture, environment and trade, farmers, exporters, NGOs, research institutions, academia, etc.
- Review the current practices and situation regarding OA, including current levels of production, national legislation and policies, main production and marketing constraints, and so forth, through detailed studies.

- Facilitate the development of policy options for promoting OA and assessing the potential impact from the implementation of these policies.
- Identify further capacity-building/technical cooperation needs and possible implementing agents.
- Explore and facilitate the potential development of an East African organic standard that would be tailored to local ecological and socio-economic conditions and also facilitate exports to major markets.

In order to achieve these noble objectives, participation by all the stakeholder groups should be involved at all stages of the project processes. The participatory process is therefore important in the success of the OA project since its success relies on the effective participation of all stakeholder groups. It is increasingly being recognised today that participation not only facilitates success but also sustainability of activities and outcomes of projects. Among the major adopters of participatory processes is the World Bank, which is one of the most important international institutions influencing development in the developing world.

The World Bank has a history of a top-down, blueprint, and decidedly un-participatory approach to development. Its development record has been one of large, capital-intensive infrastructure-based projects rather than smaller community-based projects. Since the 1990s, however, with the mainstreaming of participatory development in rhetoric if not practice in most bilateral, non-governmental and multilateral development organisations, the World Bank has been incorporating the concept of participation into its workings. Traditionally, the World Bank has seen participation as a means of validation, essentially asking countries to rubber stamp World Bank-set agendas. The failures of the top-down approach are now evident and increasingly acknowledged. In an attempt to change the way it does business, the Bank has undertaken participatory poverty reduction strategies in a number of countries. The 2000/01 World Development Report is based on a participatory process of consultations with the poor themselves (Shah 2000).

Parmesh Shah described what he calls the **Consultation Plus Agenda**. It is an attempt to move the Bank to move beyond the "coffee and donuts" validation type of participation and towards a true participatory process of consultation in the formulation of country assistance strategies to help achieve poverty reduction. Parmesh argues that there is a direct correlation between ownership and reform: if a country has not participated in devising reform strategies, those strategies will fail; if there is an element of participation, the reforms are more likely to be successful. The Consultation Plus Agenda looks at how to move to a multidimensional understanding of poverty and how to design interventions differently. The World Bank has also tended to take a sectoral rather than a multidimensional approach and is now trying to use social capital more effectively. Participatory monitoring and evaluation is needed for sustainable change. Why is the Bank doing this? The answer is, to increase the quality of civic engagement, and develop a broad-based and transparent process. If more people know what is happening, more will act on it. The challenge is to adapt participatory methods to a policy-making context.

Aspects of the **participation plan** include: consultation within government, civic engagement at the national level; civic engagement at the local level (currently the weakest area for the World Bank); information dissemination; and feedback mechanisms. Some indicators of the quality of participation will be participation throughout the life of a project; ongoing innovation (i.e. being able to change a project after two years if errors are recognized); and the sharing of

power. Finally, the quality would be assessed by the degree of mutual accountability: people should be able to have control over performers/performance and be able to change it.

What is Participation?

Participation can be viewed as a means to an end or as an end in itself. When the former is the case, the aim is to increase the effectiveness, relevance, efficiency and sustainability of a programme or project; when identified as an end in itself, the objectives of a programme or project focus on the enhancement of the beneficiaries' capacity to improve their working and living conditions.

There are **three perspectives of participation**. The efficiency perspective sees participation as the key to better and more sustainable implementation of projects. The rights perspective sees participation as a right of citizens in democracies; it generates and reflects empowerment. Finally the information/learning perspective as the process is normally used for collecting data, documenting the views of people, and recording their livelihood sources and perceptions of well-being, risk, insecurity, trust in institutions, and gender relations among others.

Participation as a means and as an end

Participation as a *means* implies teamwork: people co-operating with each other to achieve certain goals better and quicker. For example, participation through a co-operative enterprise can be a means of improving both production levels and standards of living: community participation in the construction of a drainage system is one example. Tripartite dialogue between workers', employers' and government representatives is an important example of how progress can be achieved in collective bargaining issues by means of mutual co-operation.

Participation consists of various dynamic processes, and is therefore subject to change over time. The meaning and understanding of the participatory process may also vary with the subject area in which it is developed. In some cases participation may meet barriers rendering it ineffective. These barriers should be identified and removed where possible or circumvented.

Participation quality

For a participatory process to be of high quality, the following aspects have to be included;

- Intergovernmental participation
- Extent and nature of civil society involvement include direct consultation with poor and vulnerable groups
- Institutional mechanism (for donor co-ordination and collaboration)
- Continuous feedback mechanism for follow up during and after project formulation)
- Mechanism for information disclosure
- Linkage with existing processes
- Sustainability mechanism (incentive or motivation)
- Direct consultations with stakeholders - understanding nature and status of OA
- Representative ness of various stakeholders of study findings.

Civil society: extent and nature of participation

The participation of civil society has several aspects of involvement including:-

- providing inputs (ideas and opinions)
- providing feedback on drafts
- organising and facilitating consultations with other stakeholders

- employed local experts who have direct knowledge of the context and people
 - understand priority areas and their concerns
 - explore new avenues for OA
 - providing data and information to researchers through Household surveys and PRAs
- *Network of civil society and NGO groups, labour and rural associations, women's groups, NGO umbrella organisations and faith based groups, co-operatives. Also media - for publicity of results, processors, exporters, distributors and consumers associations.

Donor Co-ordination and Collaborations

On the other hand, donor participation will involve: -

- sharing information with other donors
- seeking expertise of donors
- share market information and OA output opportunities
- establishment of a co-operatives framework to co-ordinate aid and technical support

In implementing the participatory process 2 phases may be employed. [in our case this can be done during same meeting, one after the other]

Phase One: Listening phase:

- Facilitated by local NGO, (Envirocare) Project Team listeners in the discussions of OA in selected areas
- Invited participants: government, NGO, civil societies, farmers associations/Co-operatives, Agriculture Marketing Organisations, Private sectors (buyers of produce and suppliers of agriculture inputs) for a brainstorming session with the facilitation of the research team. This phase should involve bringing together stakeholders for a brainstorming session in order to share knowledge, expertise, experiences, possibilities opportunities and obstacles among others.

Phase Two: Reporting and discuss outlines of Draft Project Plan

- Research team reporting stakeholder inputs which include expert inputs. Further inputs should be provided to improve the document

Participation Process

1. **Levels of stakeholders:** International (Donors and experts levels) National, District, Village levels.
2. **Timing of project implementation:** Project conception, inception, planning, implementation, output, monitoring & evaluation, sustainability (Post project)
3. **Forms of participation:** Ideas & opinion and expertise contribution, implementation activities; benefits & costs sharing, monitoring & evaluation.
4. **Mechanisms:**
 - Meetings and workshops
 - Study visits to exchange experiences
 - Consultations: Stakeholder groups (private, NGOs, civil society, Govt, Donors etc)
 - Information dissemination: planning, drafts, notes, policy briefs, media and reports.
 - Demonstrations: technology donors, farm plots etc.
5. *Why stakeholders should be involved*
 - To provide information and lessons on the IA team

- To provide feedback to their constituency example when they are invited to the workshop
- For regulatory functions, registry of pesticides example when it comes to the registration of bio-pesticides TPRI have the mandate of doing registration. Stakeholders can be a good source of influencing the registration processes
- To provide technical expert in preparation of the IA report
- To assist in facilitation, sharing of expertise and experience

Roles of actors under different level

	LEVEL	INVOLVEMENT (ACTORS)	ACTIVITIES/ROLES
1	International level	UNEP Donors Experts Relevant organisations	<ul style="list-style-type: none"> • Opinions and ideas • Expert opinions and guidance • Financial consideration
2	National level	FAO, TRADE, AGR. COOPS, UNCTAQD, UNDP, etc) GOVTS, NGOs, Private Steering Com.	<ul style="list-style-type: none"> • Discussion of concept • Contribute ideas • Involved in planning and implementation (include selected regions, official reps. • MSE
3	District level	Government (local) NGOs, Private, CBO's Regional Rep. Village Reps.	<ul style="list-style-type: none"> • Discuss concept and contribute ideas • Get involved in planning and implementation *(include rep. from regional secretariat) • Involved to MSE
4	Village level	Government (village) CBO's, District Rep. Farmers, Traders NGOs etc	<ul style="list-style-type: none"> • Discuss concept of project and contribute ideas, opinions and experiences. • Get involved in planning and implementation of project activities • Get involved in monitoring and evaluation • Benefit and cost sharing • After project propagation and implementation of project idea

Stakeholders identification and analysis

In identifying stakeholders we consider the following aspects

- Role
- Contribution
- Benefit
- Cost
- Importance (magnitude of influence)

TABLES

Table 1(a). Certified Organic Production 2004/05

S/N	Firm	Location	Product	Area (Ha)	Number of Farmers	Production (MT)
1	Fidahussein	Coast region, Mkuranga district	Honey	3,077 hives	507	NA
2	Biore Tz	Shinyanga, Meatu district	Cotton	5,748	1,283	1,620
3	KNCU	Kilimanjaro	Arabica coffee	812	1,193	72
4	KCU	Kagera	Robusta coffee	204	334	(in conversion)
5	PCI	Coast region, Mkuranga district	Cashewnuts	1,525	468	425
6	Zanz-Germ	Zanzibar	Spices	4,400	1,400	65
7	Biolands International Lts	Mbeya , Kyela district	Cocoa	NA	3,500	2,000
8	CSOD	Pemba	Essential Oil	50	50	
9	Matunda Mema	Kagera	Dried fruits	294	78	NA
10	Mkuranga Women Group	Coast region, Mkuranga district	Vegetables for local markets	3.4	34	NA
Total (Hives excluded)				14,252.4	24,192	>2,891

Source: -Extracted from Kick off Study of UNEP/UNCTAD-CBTF Prepared for the Project on Promoting Production and Trading Opportunities for OA in East Africa,
 -EPOPA Report on Basic Data on Certified Organic Production and Export in Tanzania, 2003
 -Interviews to firms

Table 1(b). Uncertified Crop Production 1999/00-2000/01 (MT)

S/N	Location	Product	1999/2000			2000/2001		
			Number of Farmers	Area (Ha)	Production (MT)	Number of Farmers	Area (Ha)	Production (MT)
1	Singida	Sunflower, pigeon peas, groundnuts	116,232	21,690	13,130	116,232	32,201	24343
2	Arusha, Babati district	Sunflower, pigeon peas, groundnuts	84,194	18,194	15,103	84,194	27,780	17619
Total			200,426	39,884	28,233	200,426	59,981	41,962

Source: Agro Eco Report: Organic and like-minded movements in Africa: Development and status: IFOAM. 2003.

Table (1c). Uncertified Vanilla Production and Export from Kagera Region

Year	Area (Ha)	Number of Farmers	Amount Purchased (fresh beans) kgs	Price (USD/kg)	Amount Exported (cured beans)kgs	Price (USD/kg)
2002/03	63	3,010	946	10	158	250-280
2003/04	113	5,069	5,000	10-30	947	50-55

Source: MAYAWA, 2005

Table 1(d). Uncertified Honey Production 1999/00-2000/01 (MT)

S/N	Location	1999/2000	2000/2001
1	Singida	27.3	51.9
2	Rukwa, Chunya	49	58.5
3	Tabora	18	54
4	Arusha, Babati district	16	30.7
5	Tanga, Handeni	NA	150
Total		110.3	345.1

Source: -Agro Eco Report: Organic and like-minded movements in Africa: Development and status: IFOAM. 2003.

-Newspaper; Business Times of 14/10/2005.

Table 2. National Production and Export of Organic Cotton 1995/96 – 2001/02 (Kgs)

Season	Organic Cotton		Convention cotton			Organic Cotton Produced	
	Production and Export	Price USD/Kg	Production Kg	Exported Kg	Price USD/Kg	Over Total (%)	Production
1995/96	NA	NA	74,126	56,291	1.88	NA	
1996/97	NA	NA	84,383	67,995	1.59	NA	
1997/98	316,000	NA	67,464	60,940	1.72	0.005	
1998/99	421,000	1.7	35,059	27,373	1.39	0.012	
1999/00	316,000	1.3	33,390	31,397	0.99	0.009	
2000/01	195,000	1.1	41,219	31,724	1.21	0.005	
2001/02	187,000	1.4	49,468	37,204	0.92	0.004	
2002/03	545,000	1.5	62,664	46,412	0.88	0.003	
2003/04	363,000	1.6	46,521	34,512	1.2	0.008	

Source: Cotton Board of Tanzania; 2005

Table 3. A Sample data for Spice Production and Marketing for 2003/04 Season (MT)

S/N	Crop	Where produced	Production of Fresh product (MT)	Productivity of Fresh product (MT/Ha)	Farm gate Price of Fresh product (USD/MT)	Exports Exported Dried product (MT)	Price (USD/MT)
1	Ginger	Kasulu, Kigoma	560	10.0	120	70	3,500
2	Turmeric	Coast region	48	8.0	130	8.0	3,300
3	Chili	Unguja North	15	3.5	400	3.0	5,500
4	Black pepper	Muheza	45.5	5.5	200	6.5	4,000
5	Lemon grass	Unguja North	16	8.0	100	4.0	2,700

Source: Envirocare Survey in Zanzibar, 2005

Table 4 SWOT Analysis

STRENGTH	WEAKNESS
<ul style="list-style-type: none"> ○ Presence of supportive International organisations e.g. UNEP, UNCTAD, FAO, ITC, etc. ○ Abundant labour force ○ Large and unpolluted land mass for expansion ○ Increase in demand of OA production ○ Involvement of research and training institutions, civil societies in promoting OA ○ Presence of organic standards ○ Presence of the local certification body-TanCert ○ Presence of the organic movement-TOAM 	<ul style="list-style-type: none"> ○ Lack of capacities to carry out OA initiatives ○ Lack of policy and regulations on OA ○ Lack of coordination in the OA industry ○ Limited Research & Development activities ○ Lack of natural/organic inputs e.g. pesticides, fertilizers ○ Lack of capital and marketing skills ○ Lack of information and data on OA ○ Inadequate extensionists knowledgeable in OA ○ Lack of suitable infrastructure ○ High certification costs ○ Lack of skilled labour ○ Lack of awareness by consumers to demand for healthy food ○ Under supply of organic products
OPPORTUNITIES	THREAT
<ul style="list-style-type: none"> ○ Unexplored domestic market ○ High demand to the export market ○ Presence of trainable manpower ○ Availability of land for expansion ○ Presence of unpolluted environment ○ Presence of indigenous knowledge 	<ul style="list-style-type: none"> ○ Disease and pest outbreak ○ Natural calamities e.g. drought, floods ○ Poor adoption of OA by farmers ○ Introduction of GMOs technologies ○ Presence of unfavourable policies

Table 5: Target Crops

Criteria	Coffee	Vanilla	Cloves	Cotton	Tea	Cashew	Sesame	Peanuts	Cocoa	Honey	Ginger	Turmeric	Chili (bird eye)
Data availability	3	3	3	3	3	3	1	1	1	3	2	2	3
Benefits	3	3	3	3	3	3	1	3	2	3	3	3	2
Distribution	3	3	3	3	3	3	3	3	1	3	3		3
Market demand	0	0	0	0	0	0	0	0	0	0	0	0	0
- Local	1	0	0	3	2	3	0	0	2	2	0	0	0
- Export	3	3	3	3	3	3	3	3	3	3	3	3	2
Prodn expansion potential	3	3	3	3	3	3	3	3	2	3	3	3	3
Environmental impacts	3	3	2	3	3	3	1	1	1	3	1	1	1
Indigenous knowledge	2	1	3	3	3	3	3	3	2	3	3	3	3
Score	21	19	20	24	23	24	15	17	14	23	18	15	17